

Name: \_\_\_\_\_ Date: \_\_\_\_\_

## Bouncing Beams and Silent Spacewalks: 3rd Grade Waves Quiz

Solve puzzles about how whale songs travel through water and why mirrors show our faces in this introductory physics challenge.

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**1. If you are standing in a large, empty gym and shout loudly, you might hear your voice again a second later. What is this called?**

- A. A shadow
- B. An echo
- C. A vibration
- D. A whisper

**2. True or False: Sound waves can travel through water.**

- A. True
- B. False

**3. Light waves allow us to see our own face when we look into a \_\_\_ because the light bounces off the shiny surface.**

- A. Window
- B. Brick wall
- C. Mirror
- D. Shadow

**4. When you pluck a rubber band, it moves back and forth very fast to make a sound. This fast movement is called a:**

- A. Reflection
- B. Vibration
- C. Vacuum
- D. Shadow

**5. True or False: Light waves can travel through the empty space between the Sun and the Earth.**

- A. True
- B. False

**6. If you go behind a large tree, you enter a dark area where the tree blocks the light waves. This dark area is a \_\_\_.**

- A. Reflection
- B. Rainbow
- C. Shadow
- D. Vibration

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**7. Which of these things does NOT make its own light waves?**

- A. A flashlight
- B. The Sun
- C. A lit candle
- D. A metal spoon

**8. When a drummer hits a drum softly, the sound is quiet. To make a louder sound, the drummer must hit it with more \_\_\_\_.**

- A. Energy
- B. Water
- C. Mirrors
- D. Shadows

**9. What happens to sound if there is absolutely no air, water, or ground for it to move through?**

- A. It gets louder
- B. It turns into light
- C. It cannot travel at all
- D. It speeds up

**10. True or False: We can see objects because light waves bounce off them and enter our eyes.**

- A. True
- B. False